

PRAFlaDur® 90

P90-R PS90 B2_{ca} s1d1a1

Halogen-free energy cables with low heat release rate in case of fire

with circuit integrity of whole cable installation according to ČSN 73 0895, STN 92 0205

DESIGN



- 1 | Copper conductor, round solid (RE) or round stranded (RM)
- 2 | Primary insulation (silicone rubber)
- 3 | Secondary insulation (silicone rubber)
- 4 | Inner covering (halogen-free polymer compound)
- 5 | Sheath (halogen-free polymer compound, brown)

APPLICATION

This cable is intended for the stationary distribution of electrical energy in dry or damp premises. Suitable for hotels, hospitals, underground railways, airports etc. to protect people and technical building equipment in the event of fire if circuit integrity is required (circuit integrity is only maintained if these cables are installed with specified supporting elements). The cable releases little heat and smoke under fire. The cable is not UV-resistant.

TECHNICAL DATA



Standard:
TP PRAKAB 04/08



Rated voltage:
0.6/1 kV



Test voltage:
4 kV/50 Hz



Temperature range:
laying temperature: min. -5 °C
operating temperature: -30 °C up to +90 °C
short-circuit temperature: max. +250 °C/5 sec



Bending radius (min.):
12 x Ø of cable



Core identification:
HD 308 S2, EN 50334



Fire properties:
flame retardant:
EN 60332-1-2
halogen-free, non-corrosive combustion gases:
EN 60754-2
low smoke emission:
EN 61034-2
reduced flame propagation:
EN 60332-3-22
insulation integrity:
IEC 60331-21 – 180 min.
circuit integrity:
ČSN 73 0895, STN 92 0205
classification of the reaction to fire:
EN 13501-6



Certificate:
EZÚ Czech Republic, TSÚS Slovakia

Number of cores x nominal cross section (mm ²)	Max. conductor resistance (Ω/km)	Current rating in the air (A)	Outer diameter ca. (mm)	Total weight ca. (kg/km)	Standard lengths/ packing (m)
PRAFlaDur® 90 P90-R					
2 x 1.5 RE	12.100	28.0	13.0	225	1,000 D
3 x 1.5 RE	12.100	24.0	13.6	250	1,000 D
4 x 1.5 RE	12.100	24.0	14.5	290	1,000 D
5 x 1.5 RE	12.100	16.0	15.5	335	1,000 D
7 x 1.5 RE	12.100	15.5	16.6	400	1,000 D
10 x 1.5 RE	12.100	13.0	20.2	535	500 D
12 x 1.5 RE	12.100	12.5	20.7	605	500 D
14 x 1.5 RE	12.100	12.0	21.6	670	500 D

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PRAFlaDur® 90 P90-R					
19 x 1.5 RE	12.100	10.5	23.7	835	500 D
24 x 1.5 RE	12.100	9.5	27.3	1,020	500 D
30 x 1.5 RE	12.100	9.0	28.8	1,210	500 D
40 x 1.5 RE	12.100	8.0	32.0	1,570	500 D
2 x 2.5 RE	7.410	37.0	13.8	270	1,000 D
3 x 2.5 RE	7.410	32.0	14.4	305	1,000 D
4 x 2.5 RE	7.410	32.0	15.5	355	1,000 D
5 x 2.5 RE	7.410	22.0	16.6	410	1,000 D
7 x 2.5 RE	7.410	20.5	17.8	510	1,000 D
10 x 2.5 RE	7.410	17.5	21.7	685	500 D
12 x 2.5 RE	7.410	16.5	22.4	780	500 D
14 x 2.5 RE	7.410	16.0	23.4	870	500 D
19 x 2.5 RE	7.410	14.0	25.7	1,100	500 D
24 x 2.5 RE	7.410	12.5	29.9	1,370	500 D
30 x 2.5 RE	7.410	12.0	31.7	1,680	500 D
40 x 2.5 RE	7.410	11.0	35.0	2,180	500 D
2 x 4 RE	4.610	49.0	14.8	330	1,000 D
3 x 4 RE	4.610	42.0	15.4	380	1,000 D
4 x 4 RE	4.610	42.0	16.6	450	1,000 D
5 x 4 RE	4.610	28.0	17.9	525	1,000 D
7 x 4 RE	4.610	27.0	19.2	650	500 D
10 x 4 RE	4.610	23.0	23.6	895	500 D
12 x 4 RE	4.610	22.0	24.3	1,030	500 D
14 x 4 RE	4.610	21.0	25.5	1,140	500 D
19 x 4 RE	4.610	18.5	28.1	1,490	500 D
2 x 6 RE	3.080	62.0	15.8	400	500 D
3 x 6 RE	3.080	53.0	16.5	470	500 D
4 x 6 RE	3.080	53.0	17.8	560	500 D
5 x 6 RE	3.080	36.0	19.2	660	500 D
2 x 10 RE	1.830	85.0	17.7	565	500 D
3 x 10 RE	1.830	74.0	18.6	680	500 D
4 x 10 RE	1.830	74.0	20.0	815	500 D
5 x 10 RE	1.830	49.0	21.6	965	500 D
1 x 16 RM	1.150	131.0	12.1	310	500 D, 1,000 D
2 x 16 RM	1.150	113.0	19.5	750	500 D
3 x 16 RM	1.150	98.0	20.5	920	500 D
4 x 16 RM	1.150	98.0	22.2	1,110	500 D
5 x 16 RM	1.150	65.0	24.1	1,340	500 D
1 x 25 RM	0.727	177.0	13.7	425	500 D, 1,000 D
3 x 25 RM	0.727	133.0	23.8	1,370	500 D
3 x 25 RM + 16 RM	0.727/1.150	133.0	27.1	1,560	500 D
4 x 25 RM	0.727	133.0	27.1	1,680	500 D

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PRAFlaDur® 90 P90-R					
5 x 25 RM	0.727	90.0	30.4	2,010	500 D
1 x 35 RM	0.524	217.0	14.7	535	500 D, 1,000 D
3 x 35 RM	0.524	162.0	26.9	1,730	500 D
3 x 35 RM + 16 RM	0.524/1.150	162.0	29.6	1,930	500 D
4 x 35 RM	0.524	162.0	29.6	2,200	500 D
5 x 35 RM	0.524	109.0	32.9	2,590	500 D
1 x 50 RM	0.387	265.0	16.5	680	500 D, 1,000 D
3 x 50 RM	0.387	197.0	31.5	2,370	500 D
3 x 50 RM + 25 RM	0.387/0.727	197.0	34.4	2,680	500 D
4 x 50 RM	0.387	197.0	34.4	3,030	500 D
5 x 50 RM	0.387	133.0	37.8	3,450	500 D
1 x 70 RM	0.268	336.0	18.3	910	500 D, 1,000 D
3 x 70 RM	0.268	250.0	36.7	3,070	500 D
3 x 70 RM + 35 RM	0.268/0.524	250.0	40.1	3,510	500 D
4 x 70 RM	0.268	250.0	40.1	3,820	500 D
5 x 70 RM	0.268	180.0	43.1	4,710	500 D
1 x 95 RM	0.193	415.0	20.4	1,190	500 D, 1,000 D
3 x 95 RM	0.193	308.0	41.6	4,120	500 D
3 x 95 RM + 50 RM	0.193/0.387	308.0	46.0	4,750	500 D
4 x 95 RM	0.193	308.0	46.0	5,200	500 D
5 x 95 RM	0.193	215.0	49.3	6,230	500 D
1 x 120 RM	0.153	485.0	22.1	1,450	500 D, 1,000 D
3 x 120 RM	0.153	359.0	45.5	5,030	500 D
3 x 120 RM + 70 RM	0.153/0.268	359.0	49.8	5,810	500 D
4 x 120 RM	0.153	359.0	49.8	6,280	500 D
5 x 120 RM	0.153	247.0	53.4	7,630	500 D
1 x 150 RM	0.124	557.0	25.3	1,740	500 D, 1,000 D
3 x 150 RM	0.124	412.0	48.6	6,170	300 D
3 x 150 RM + 70 RM	0.124/0.268	412.0	54.5	7,100	300 D
4 x 150 RM	0.124	412.0	54.5	7,250	300 D
5 x 150 RM	0.124	279.0	59.3	9,400	300 D
1 x 185 RM	0.099	646.0	26.4	2,160	500 D
3 x 185 RM	0.099	475.0	52.9	7,390	300 D
3 x 185 + 95 RM/RM	0.099/0.193	475.0	58.8	8,345	300 D
4 x 185 RM	0.099	475.0	58.8	9,370	300 D
4 x 185 + 95 RM/RM	0.099/0.193	475.0	65.2	10,511	300 D
5 x 185 RM	0.099	321.0	65.2	11,365	300 D
1 x 240 RM	0.075	774.0	29.4	2,765	500 D
3 x 240 RM	0.075	564.0	59.7	9,530	300 D
3 x 240 + 120 RM/RM	0.075/0.153	564.0	66.0	10,870	300 D
4 x 240 RM	0.075	564.0	66.0	12,025	300 D
5 x 240 RM	0.075	380.0	73.8	14,770	300 D

Subject to technical changes.